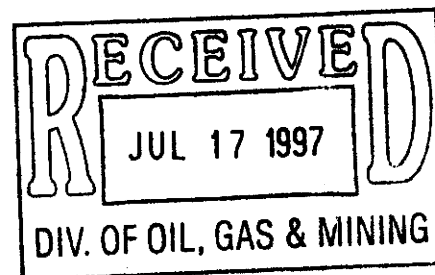


P O. Box 421
Eureka, Utah 84628
(801) 433-6804
FAX (801) 433-6803

6 FILE m/023/007



North Lily Mining Company



July 14, 1997

State of Utah
Attn: Compliance and Monitoring Program
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4780

RE: Second Quarter Monitoring Report 1997

Dear Compliance and Monitoring Personnel:

In compliance with Part II of the Ground Water Discharge Permit No. 23000 issued to North Lily Mining Company in May 1991 and extended in August 1996, please find enclosed:

1. Well water analysis for second quarter of 1997
2. Spillway sample for the second quarter 1997

Due to the reclamation work completed during the fourth quarter 1996, ie the contouring and grading of the heap lead pad the spill ways were filled and a modified drainage system was installed thus altering the need for monitoring the sumps. During the first quarter of 1997 the sumps were not monitored. If solution were to become trapped in the sumps, the chemical composition of the solution would be similar to that of the spillway sample.

A well water sample was delivered to Chemtec/Ford, a Utah certified laboratory, on June 10, 1997 for analysis with a request that the water be analyzed per the specification required by the Division of Water Quality.

A spillway sample was taken at the same time and delivered to Chemtec/Ford to monitor the reduction of metals and cyanide in the solution coming off the heap leach pads. This has been done to enable North Lily to better meet and comply with state and federal water quality standards. The following table outlines the progress to date on some of the metals and cyanide (all analysis are reported in mg/l):

Page 2 Second Quarter Monitoring Report 1997

PARAMETER	*GROUND WATER QUALITY STANDARD	DETECTED IN								
		JUN 95	SEP 95	DEC 95	MAR 96	JUN 96	SEP 96	DEC 96	MAR 97	JUN 97
Fluoride as F	2.4	4.94	5.2	5.7	3.5	5.9	1.6	5.4	3.4	3.1
Arsenic as As	0.05	0.59	0.814	0.500	1.3	0.63	0.44	0.31	0.40	0.06
Barium as Ba	2.0	0.018	0.02	<0.20	<0.05	0.02	0.02	<0.2	0.02	0.03
Cadmium as Cd	0.005	<.001	<0.01	<0.05	<0.025	<0.02	0.008	<0.1	<0.01	<0.01
Chromium as Cr	0.1	<.007	<0.01	<0.05	<0.025	0.041	0.040	<0.1	<0.005	<0.04
Copper as Cu	1.3	283	255	188	162	161	102	80.2	69.6	55.0
Lead as Pb	0.015	0.066	0.100	0.100	<0.04	0.14	0.11	1.3	0.13	0.10
*Mercury as Hg	0.002	0.0020	0.232	0.329	0.39	0.40	0.27	0.31	0.35	0.051
Selenium as Se	0.05	0.24	0.17	0.024	0.03	<0.02	0.02	0.05	0.08	0.02
Silver as Ag	0.05	1.8	4.24	3.43	0.56	1.32	7.74	<0.1	1.240	77.0 <i>O.H.</i>
Zinc As Zn	5.0	0.500	0.19	0.20	0.08	0.30	0.35	<0.2	0.17	0.03
Cyanide as CN-T	0.75	256	300	*NOTE	163	149	91	62	61	19.6
Cyanide as CN-Wad	0.20	239	291	169	153	156	93	64	63	19.2
pH	6.5 to 8.5	8.82	9.31	8.95	9.39	9.20	8.6	8.7	9.00	9.10

* Administrative Rules For Ground Water Quality Protection - Effective Date of Last Revision - March 20, 1995

* Digested analyzed by AWAL

As the above table indicates, the effluent coming from off the heap leach pads showed significant reductions in several metals and total and wad cyanide levels for the last quarters.

On May 22, 1997 DWQ approved North Lily's March 5, 1997 application for it's Fluid Disposal Plan. As of July 14, 1997 approximately 640,000 gallons of heap leach runoff water has been disposed of on land adjacent to the heap leach pads. The barren pond is empty and the preg pond is nearly empty. The flow coming off the pad at this time is estimated at 5 gallons per minute.

The Proposed Draft mailed from DWQ on June 19, 1997 of the Closure Plan is being reviewed.

Thank you for your consideration and if you have questions, comments or concerning please contact Paul Spor at (801) 634-1584.

Sincerely,

Paul C. Spor
General Manager

cc: Roger A. Foisy, Division of Water Quality
Tom Munson, Division of Oil, Gas, and Mining
Tom Gast, Environmental Management Services

07/15/97

09:02

CHEMTECH → 1+801+634+1584

NO. 373

D02

CHEMTECH-FORD

ANALYTICAL LABORATORY

To: North Lilly Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Date: 7/14/97

Group #: 16064
Lab #: 97-U006328
Project: SILVER CITY
Sample Desc: Well Storage Inlet

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:15
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	139	1	6/12/97 14:00	SM 2320B	TM
Carbonate as CO ₃ , mg/L	< 1	1	6/12/97 14:00	SM 2320B	TM
Alkalinity, Solids, mg/L	69	1	6/12/97 14:00	SM 2320B	TM
Hydroxide as OH, mg/L	< 1	1	6/12/97 14:00	SM 2320B	TM
Alkalinity, Total (CaCO ₃), mg/L	114	1	6/12/97 14:00	SM 2320B	TM
Carbon Dioxide, mg/L	102	1	6/12/97 14:00	SM 4500 D	TM
Chloride (D), mg/L	148	1	6/16/97 8:30	EPA 325.3	TM
Conductance, Specific, umhos/cm	876.9	0.1	6/12/97 9:00	EPA 120.1	KRF
Cyanide (T), mg/L	< 0.002	0.002	6/17/97 16:00	ASTM D2036	TPH
Fluoride, mg/L	0.2	0.1	6/24/97 14:00	EPA 340.2	EG
Hardness, EDTA Titration, mg/L	285	12	6/17/97 13:00	EPA 130.2	TM
Hardness Index: Hard Water					
Mercury (T), as Hg, mg/L	< 0.0002	0.0002	6/27/97 12:00	EPA 245.1	EG
Nitrite, Nitrogen, mg/L	< 0.005	0.005	6/10/97 17:00	EPA 354.1	BJP
Nitrate/Nitrite-Nitrogen, mg/L	1.20	0.08	7/ 3/97	EPA 353.1	AWAL
pH, units	7.80	0.05	6/10/97 12:00	EPA 150.1	LS
Phosphorus, Ortho, mg/L	0.01	0.01	6/10/97 16:00	SM 4500E	BJP
Sulfate, mg/L	91	35	6/17/97 8:30	EPA 375.4	TM
Total Dissolved Solids, mg/L	512	10	6/10/97 14:00	EPA 160.1	LS
Total Suspended Solids, mg/L	< 2.5	2.5	6/10/97 12:00	EPA 160.2	LS

Approved By: 

07/15/97

09:03

CHEMTECH → 1+801+634+1584

NO. 373

D03

CHEMTECH-FORD

ANALYTICAL LABORATORY

Date: 7/14/97

To: North Lily Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Group #: 16064
Lab #: 97-U006328
Project: SILVER CITY
Sample Desc: Well Storage Inlet

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:15
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Turbidity, NTU	0.55	0.05	6/10/97 12:00	EPA 180.1	LS
Barium (T), as Ba, mg/L	0.06	0.01	6/17/97 9:57	EPA 200.7	LH
Beryllium (T), as Be, mg/L	< 0.001	0.001	6/17/97 9:57	EPA 200.7	LH
Calcium (T), as Ca, mg/L	57.2	0.1	6/17/97 9:57	EPA 200.7	LH
Chromium (T), as Cr, mg/L	< 0.005	0.005	6/17/97 9:57	EPA 200.7	LH
Copper (T), as Cu, mg/L	< 0.01	0.01	6/17/97 9:57	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.11	0.02	6/17/97 9:57	EPA 200.7	LH
Magnesium (T), as Mg, mg/L	31.4	0.1	6/17/97 9:57	EPA 200.7	LH
Manganese (T), as Mn, mg/L	< 0.01	0.01	6/17/97 9:57	EPA 200.7	LH
Nickel (T), as Ni, mg/L	< 0.01	0.01	6/17/97 9:57	EPA 200.7	LH
Potassium (T), as K, mg/L	3.3	0.1	6/17/97 9:57	EPA 200.7	LH
Sodium (T), as Na, mg/L	57.1	0.1	6/17/97 9:57	EPA 200.7	LH
Zinc (T), as Zn, mg/L	0.07	0.01	6/17/97 9:57	EPA 200.7	LH
Antimony (T), as Sb, mg/L	< 0.002	0.002	6/20/97 12:44	EPA 200.9	EG
Arsenic (T), as As, mg/L	0.005	0.005	6/16/97 11:35	EPA 200.9	EG
Cadmium (T), as Cd, mg/L	< 0.001	0.001	6/16/97 7:02	EPA 200.9	EG
Lead (T), as Pb, mg/L	< 0.005	0.005	6/19/97 11:38	EPA 200.9	EG
Selenium (T), as Se, mg/L	< 0.002	0.002	6/19/97 6:59	EPA 200.9	EG
Silver (T), as Ag, ug/L	< 0.5	0.5	6/13/97 8:57	EPA 200.9	EG
Thallium (T), as Tl, mg/L	< 0.001	0.001	6/12/97 7:13	EPA 200.9	EG

Approved By: 

07/15/97

09:04

CHEMTECH → 1+801+634+1584

NO. 373

084

CHEMTECH-FORD

ANALYTICAL LABORATORY

Date: 7/14/97

To: North Lily Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Group #: 16064
Lab #: 97-U006328
Project: SILVER CITY
Sample Desc: Well Storage Inlet

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:15
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cation, meq/L	8.01				
Anion, meq/L	8.39				
% Difference,	2.23				
Receiving Temperature, C	18.1		6/10/97 11:00		RCG

NOTE: Sample submitted not on ice.

Approved By: 

07/15/97

09:56

CHEMTECH → 1+801+634+1584

NO. 373 002

CHEMTECH-FORD

ANALYTICAL LABORATORY

To: North Lily Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Date: 7/15/97

Group #: 16064
Lab #: 97-U006329
Project: SILVER CITY
Sample Desc: Main Spillway

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:30
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Bicarbonate as HCO ₃ , mg/L	108	1	6/12/97 14:00	SM 2320B	TM
Carbonate as CO ₃ , mg/L	218	1	6/12/97 14:00	SM 2320B	TM
Alkalinity, Solids, mg/L	272	1	6/12/97 14:00	SM 2320B	TM
Hydroxide as OH, mg/L	< 1	1	6/12/97 14:00	SM 2320B	TM
Alkalinity, Total (CaCO ₃), mg/L	453	1	6/12/97 14:00	SM 2320B	TM
Carbon Dioxide, mg/L	383	1	6/12/97 14:00	SM 4500 D	TM
Chloride (D), mg/L	2,270	50	6/16/97 8:30	EPA 325.3	TM
Conductance, Specific, umhos/cm	22,090	0.1	6/12/97 9:00	EPA 120.1	KRF
Cyanide, Free, mg/L	Comment	40	6/17/97 16:00	ASTM D2036	TPH
Cyanide (T), mg/L	19.6	0.8	6/17/97 16:00	ASTM D2036	TPH
Cyanide, WAD, mg/L	19.2	0.8	6/17/97 16:00	ASTM D2036	TPH
Fluoride, mg/L	3.1	0.5	6/24/97 14:00	EPA 340.2	EG
Hardness, EDTA Titration, mg/L	1,070	125	6/17/97 13:00	EPA 130.2	TM
Hardness Index: Very Hard Water					
Mercury (T), as Hg, mg/L	0.051	0.002	6/27/97 12:00	EPA 245.1	EG
Nitrite, Nitrogen, mg/L	8	1.25	6/10/97 17:00	EPA 354.1	BJP
Nitrate/Nitrite-Nitrogen, mg/L	17.0	0.08	7/ 3/97	EPA 353.1	AWAL
pH, units	9.10	0.05	6/10/97 12:00	EPA 150.1	LS
Phosphorus, Ortho, mg/L	0.48	0.02	6/10/97 16:00	SM 4500E	BJP
Sulfate, mg/L	9,320	2500	6/17/97 8:30	EPA 375.4	TM

Approved By: 

07/15/97

09:57

CHEMTECH + 1+801+634+1584

NO. 373

D03

CHEMTECH-FORD

ANALYTICAL LABORATORIE

To: North Lily Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Date: 7/15/97

Group #: 16064
Lab #: 97-U006329
Project: SILVER CITY
Sample Desc: Main Spillway

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:30
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Total Dissolved Solids, mg/L	18,300	50	6/12/97 12:00	EPA 160.1	LS
Total Suspended Solids, mg/L	8	2.5	6/10/97 12:00	EPA 160.2	LS
Turbidity, NTU	0.62	0.05	6/10/97 12:00	EPA 180.1	LS
Barium (T), as Ba, mg/L	0.03	0.01	6/18/97 12:46	EPA 200.7	LH
Beryllium (T), as Be, mg/L	< 0.001	0.001	6/18/97 12:46	EPA 200.7	LH
Calcium (T), as Ca, mg/L	362	0.1	6/18/97 12:46	EPA 200.7	LH
Chromium(T), as Cr, mg/L	< 0.04	0.04	6/18/97 12:46	EPA 200.7	LH
Copper (T), as Cu, mg/L	55.0	0.01	6/18/97 12:46	EPA 200.7	LH
Iron (T), as Fe, mg/L	0.05	0.02	6/18/97 12:46	EPA 200.7	LH
Magnesium (T), as Mg, mg/L	7.6	0.1	6/18/97 12:46	EPA 200.7	LH
Manganese (T), as Mn, mg/L	0.04	0.01	6/18/97 12:46	EPA 200.7	LH
Nickel (T), as Ni, mg/L	0.37	0.01	6/18/97 12:46	EPA 200.7	LH
Potassium (T), as K, mg/L	286	0.1	6/18/97 12:46	EPA 200.7	LH
Sodium (T), as Na, mg/L	5,700	10	7/ 1/97 10:01	EPA 200.7	LH
Zinc (T), as Zn, mg/L	0.03	0.01	6/18/97 12:46	EPA 200.7	LH
Antimony (T), as Sb, mg/L	< 0.04	0.04	6/20/97 12:44	EPA 200.9	EG
Arsenic (T), as As, mg/L	0.06	0.05	6/23/97 14:15	EPA 200.9	EG
Cadmium (T), as Cd, mg/L	< 0.01	0.01	6/24/97 11:24	EPA 200.9	EG
Lead (T), as Pb, mg/L	0.10	0.05	6/19/97 11:38	EPA 200.9	EG
Selenium (T), as Se, mg/L	0.02	0.02	6/19/97 6:59	EPA 200.9	EG

Approved By: 

07/15/97

09:58

CHEMTECH → 1+801+634+1584

NO. 373

004

CHEMTECH-FORD

ANALYTICAL LABORATORY

Date: 7/15/97

To: North Lily Mining Company
attn. Paul Spor
P.O. Box 421
Eureka, UT 84628

Group #: 16064
Lab #: 97-U006329
Project: SILVER CITY
Sample Desc: Main Spillway

Date Sampled: 6/10/97
Date Submitted: 6/10/97

Time Sampled: 9:30
Time Received: 11:00

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MDL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Silver (T), as Ag, ug/l	77	5	6/24/97 7:13	EPA 200.9	EG
Thallium (T), as Tl, mg/L	0.08	0.01	6/23/97 8:54	EPA 200.9	EG
Cation, meq/L	274.0				
Anion, meq/L	267.7				
% Difference,	-1.15				
Receiving Temperature, C	18.1		6/10/97 16:20		RCG

NOTE: Sample submitted not on ice.

The Free Cyanide analysis experienced interference
Nitrate analysis was performed by American West Analytical.

Approved By: 

07/15/97

09:07

CHEMTECH → 1+801+634+1584

NO. 373

008

Sample Chain of Custody

CHEMTECH - FORD

6100 SOUTH STRATLER
SLC, UT 84107
801 262-7299 PHONE
801 262-7378 FAX

1250 LAMOILLE HWY.
ELKO, NV 89801
702 738-0111 PHONE
702 733-7255 FAX

Client: North Lily Mining Co.Contact: Paul Spor Tel: 801-634-1584Date Delivered: 6/10/97

• Environmental • Waste Water • Hazardous Waste • Drinking Water • Petroleum Contamination

P. O. #:

Project: Silver City

No.

Due Date:

of

Location:

Con-

tain-

ers

Sample Taken by:

Tray Jones

Analysis Requested

Date

Time

Sampled

Sampled

C/G*

Sample Description

632B
29

6/10/97

9:15 AM

Well Storage Inlet

Drinking Water

6/10/97

9:30 AM

Main Spillway

Drinking Water

"

Free Cyanide

"

WAO Cyanide

"

Total Cyanide

* Composite or grab sample
Special Instructions:

Temperature 18.0 °C
Seal Intact yes no

Spillway Sample "contains Cyanide"

Sample Relinquished by:	Date	Time	Sample Received by:	Date	Time
<u>[Signature]</u>	<u>6/10/97</u>	<u>11:00 AM</u>	<u>[Signature]</u>	<u>6/10/97</u>	<u>11:00</u>